



COPY OF PAPERS
ORIGINAL FILED

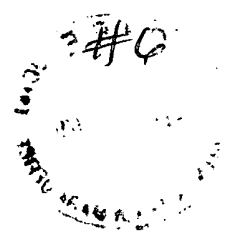


Figure 1A

Genomic nucleotide sequence of an AHAS gene from *Arabidopsis thaliana* (SEQ ID NO:1)

CTTGTATCCTTCTCTTAACCAATAAAAAAGAAAGAAAGATCAATTTGATAAATTTCTCAGC
CACAAATTCTACATTTAGGTTTTAGCATATCGAAGGCTCAATCACAAATACAATAGATAGAC
TAGAGATTCCAGCGTCACGTGAGTTTTATCTATAAATAAAGGACCAAAATCAAATCCCGAG
GGCATTTTCGTAATCCAACATAAAACCTTAAACTTCAAGTCTCATTTTTAAACAAATCATG
TTCACAAGTCTCTTCTTCTCTGTTTCTCTATCTCTTGCTCATCTTCTCCTGAACCATG
GCGGCGGCAACAACAACAACAACATCTTCTTCGATCTCCTTCTCCACCAACCATCTCC
TTCCTCCTCCAAATCACCATTACCAATCTCCAGATTCTCCCTCCCATTCTCCCTAAACCCCA
ACAAATCATCCTCCTCCTCCCGCGCGCGGATCAAATCCAGCTCTCCCTCCTCCATCTCC
GCCGTGCTCAACACAACCACCAATGTCAACAACACTCCCTCTCCAACCAACCTACCAAACC
CGAAACATTCTATCTCCCGATTGCTCCAGATCAACCCCGCAAAGGCGCTGATATCCTCGTCG
AAGCTTTAGAACGTCAAGGCGTAGAAACCGTATTGCTTACCCTGGAGGTGCATCAATGGAG
ATTACCAAGCCTTAACCCGCTCTTCTCAATCCGTAACGTCCTTCTCGTCACGAACAAGG
AGGTGTATTGCGAGCAGAAGGATACGCTCGATCCTCAGGTAAACCAGGTATCTGTATAGCCA
CTTCAGGTCCCGGAGCTACAAATCTCGTTAGCGGATTAGCCGATGCGTTGTTAGATAGTGTT
CCTCTTGTAGCAATCACAGGACAAGTCCCTCGTCGTATGATTGGTACAGATGCGTTTCAAGA
GACTCCGATTGTTGAGGTAACGCGTTTCGATTACGAAGCATAACTATCTTGTGATGGATGTTG
AAGATATCCCTAGGATTATTGAGGAAGCTTCTTTTCTAGCTACTTCTGGTAGACCTGGACCT
GTTTTGTTGATGTTTCTTAAAGATATTCAACAACAGCTTGCGATTCTTAATTGGGAACAGGC
TATGAGATTACCTGGTTATATGTCTAGGATGCCTAAACCTCCGGAAGATTCTCATTTGGAGC
AGATTGTTAGGTTGATTTCTGAGTCTAAGAAGCCTGTGTTGTATGTTGGTGGTGGTTGTTG
AATTCTAGCGATGAATTGGGTAGGTTTGTGAGCTTACGGGGATCCCTGTTGCGAGTACGTT
GATGGGGCTGGGATCTTATCCTTGTGATGATGAGTTGTGTTACATATGCTTGGAAATGCATG
GGACTGTGTATGCAAATTACGCTGTGGAGCATAGTGATTTGTTGTTGGCGTTTGGGGTAAGG
TTTGATGATCGTGTCACGGGTAAGCTTGAGGCTTTTGCTAGTAGGGCTAAGATTGTTTCATAT
TGATATTGACTCGGCTGAGATTGGGAAGAATAAGACTCCTCATGTGTCTGTGTGTGGTGATG
TTAAGCTGGCTTTGCAAGGGATGAATAAGGTTCTTGAGAACCAGCGGAGGAGCTTAAGCTT
GATTTTGGAGTTTGGAGGAATGAGTTGAACGTACAGAAACAGAAGTTTCCGTTGAGCTTTAA
GACGTTTGGGGAAGCTATTCTCCACAGTATGCGATTAAGGTCCTTGATGAGTTGACTGATG
GAAAAGCCATAATAAGTACTGGTGTGCGGGCAACATCAAATGTGGGCGGCGAGTTCTACAAT
TACAAGAAACCAAGGCAGTGGCTATCATCAGGAGGCCTTGGAGCTATGGGATTTGGACTTCC
TGCTGCGATTGGAGCGTCTGTTGCTAACCTGATGCGATAGTTGTGGATATTGACGGAGATG
GAAGCTTTATAATGAATGTGCAAGAGCTAGCCACTATTCGTGTAGAGAATCTTCCAGTGAAG
GTACTTTTATTAAACAACCAGCATCTTGGCATGGTTATGCAATGGGAAGATCGGTTCTACAA
AGCTAACCGAGCTCACACATTTCTCGGGGATCCGGCTCAGGAGGACGAGATATTCCCGAACA
TGTTGCTGTTTGCAGCAGCTTGCGGGATTCCAGCGGCGAGGGTGACAAAGAAAGCAGATCTC
CGAGAAGCTATTACAGACAATGCTGGATACACCAGGACCTTACCTGTTGGATGTGATTTGTCC
GCACCAAGAACATGTGTTGCCGATGATCCCGAATGGTGGCACTTTCAACGATGTCATAACGG
AAGGAGATGGCCGATTAAATACTGAGAGATGAAACCGGTGATTATCAGAACCTTTTATGGT
CTTTGTAT

Figure 1B

Coding nucleotide sequence of an AHAS gene from *Arabidopsis thaliana* (SEQ ID NO:2)

ATGGCGGCGGCAACAACAACAACAACATCTTCTTCGATCTCCTTCTCCACCAAACCATC
TCCTTCCTCCTCCAAATCACCATTACCAATCTCCAGATTCTCCCTCCCATTCTCCCTAAACC
CCAACAAATCATCCTCCTCCTCCCGCCGCGCGGTATCAAATCCAGCTCTCCCTCCTCCATC
TCCGCGGTGCTCAACACAACCACCAATGTCACAACCACTCCCTCTCCAACCAAACCTACCAA
ACCCGAAACATTTCATCTCCCGATTGCTCCAGATCAACCCCGCAAAGGCGCTGATATCCTCG
TCGAAGCTTTAGAACGTCAAGGCGTAGAAACCGTATTTCGCTTACCCTGGAGGTGCATCAATG
GAGATTCACCAAGCCTTAACCCGCTCTTCCTCAATCCGTAACGTCCTTCTCGTCACGAACA
AGGAGGTGTATTTCGAGCAGAAGGATACGCTCGATCCTCAGGTAAACCAGGTATCTGTATAG
CCACTTCAGGTCCCGGAGCTACAAATCTCGTTAGCGGATTAGCCGATGCGTTGTTAGATAGT
GTTCTCTTGTAGCAATCACAGGACAAGTCCCTCGTCGTATGATTGGTACAGATGCGTTTCA
AGAGACTCCGATTGTTGAGGTAACGCGTTCGATTACGAAGCATAACTATCTTGTGATGGATG
TTGAAGATATCCCTAGGATTATTGAGGAAGCTTTCTTTTCTAGCTACTTCTGGTAGACCTGGA
CCTGTTTTGGTTGATGTTCTTAAAGATATTCAACAACAGCTTTCGATTCTTAATTGGGAACA
GGCTATGAGATTACCTGGTTATATGTCTAGGATGCCTAAACCTCCGGAAGATTCTCATTG
AGCAGATTGTTAGGTTGATTTCTGAGTCTAAGAAGCCTGTGTTGTATGTTGGTGGTGGTTGT
TTGAATTCTAGCGATGAATTGGGTAGGTTTGTGAGCTTACGGGGATCCCTGTTGCGAGTAC
GTTGATGGGGCTGGGATCTTATCCTTGTGATGATGAGTTGTCGTTACATATGCTTGGAAATGC
ATGGGACTGTGTATGCAAATTACGCTGTGGAGCATAGTGATTTGTTGTTGGCGTTTGGGGTA
AGGTTTGATGATCGTGTACGGGTAAGCTTGAGGCTTTTGCTAGTAGGGCTAAGATTGTTCA
TATTGATATTGACTCGGCTGAGATTGGGAAGAATAAGACTCCTCATGTGTCTGTGTGTGGTG
ATGTTAAGCTGGCTTTGCAAGGGATGAATAAGGTTCTTGAGAACCAGCGGAGGAGCTTAAG
CTTGATTTTGGAGTTTGGAGGAATGAGTTGAACGTACAGAAACAGAAGTTCCGTTGAGCTT
TAAGACGTTTGGGGAAGCTATTCTCCACAGTATGCGATTAAGGTCCTTGATGAGTTGACTG
ATGGAAAAGCCATAATAAGTACTGGTGTGCGGCAACATCAAATGTGGGCGGCGCAGTTCTAC
AATTACAAGAAACCAAGGCAGTGGCTATCATCAGGAGGCCTTGAGCTATGGGATTGGA
TCCTGCTGCGATTGGAGCGTCTGTTGCTAACCTGATGCGATAGTTGTGGATATTGACGGAG
ATGGAAGCTTTATAATGAATGTGCAAGAGCTAGCCACTATTCGTGTAGAGAATCTTCCAGTG
AAGGTACTTTTATTAAACAACCAGCATCTTGGCATGGTTATGCAATGGGAAGATCGGTTCTA
CAAAGCTAACCGAGCTCACACATTTCTCGGGGATCCGGCTCAGGAGGACGAGATATTCCCGA
ACATGTTGCTGTTTGCAGCAGCTTGCGGGATTCCAGCGGCGAGGGTGACAAAGAAAGCAGAT
CTCCGAGAAGCTATTTCAGACAATGCTGGATACACCAGGACCTTACCTGTTGGATGTGATTTG
TCCGCACCAAGAACATGTGTTGCCGATGATCCCGAATGGTGGCACTTTCAACGATGTCATAA
CGGAAGGAGATGGCCGGATTAAATAC

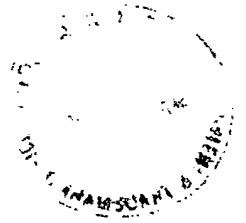


Figure 1C

Amino acid sequence of an AHAS gene from *Arabidopsis thaliana* (SEQ ID NO:3)

MAAATTTTTTSSSISFSTKPSPPSSSKSPLPISRFSLPFSLNPNKSSSSSSRRRGIKSSSPSSIS
AVLNTTTNVTTPSPTKPTKPTFISRFAPDQPRKGADILVEALERQGVETVFAYPGG
ASMEIHQALTRSSSIRNVLP RHEQGGVFAAEGYARSSGKPGICIATSGPGATNLVSGL
ADALLDSVPLVAITGQVPRRMIGTDAFQETPIVEVTRSITKHNYLVMDVEDIPRIIEEAF
FLATSGRPGPVLVDVPKDIQQQLAIPNWEQAMRLPGYMSRMPKPPEDSHLEQIVRLIS
ESKKPVLYVGGGCLNSSDELGRFVELTGIPVASTLMGLGSYPCDDELSLHMLGMHGT
VYANYAVEHSDLLAFGVRFDDEVGTGKLEAFASRAKIVHIDIDSAEIGKNKTPHVSVC
GDVKLALQGMNVLENRAEELKLDFGVWRNELNVQKQKFPLSFKTFGEAIPPQYAI
KVLDELTDGKAIISTGVGQHQMWAQFYNYKKPROWLSSGGLGAMGFGLPAAIGAS
VANPDAIVVDIDGDGSFIMNVQELATIRVENLPVKVLLLNNQHLGMVMQWEDRFYK
ANRAHTFLGDPAQEDEIFPNMLLFAAACGIPAARVTKKADLREAIQTMLDTPGPYLL
DVICPHQEHVLPMPNGGT FNDVITEGDGRIKY

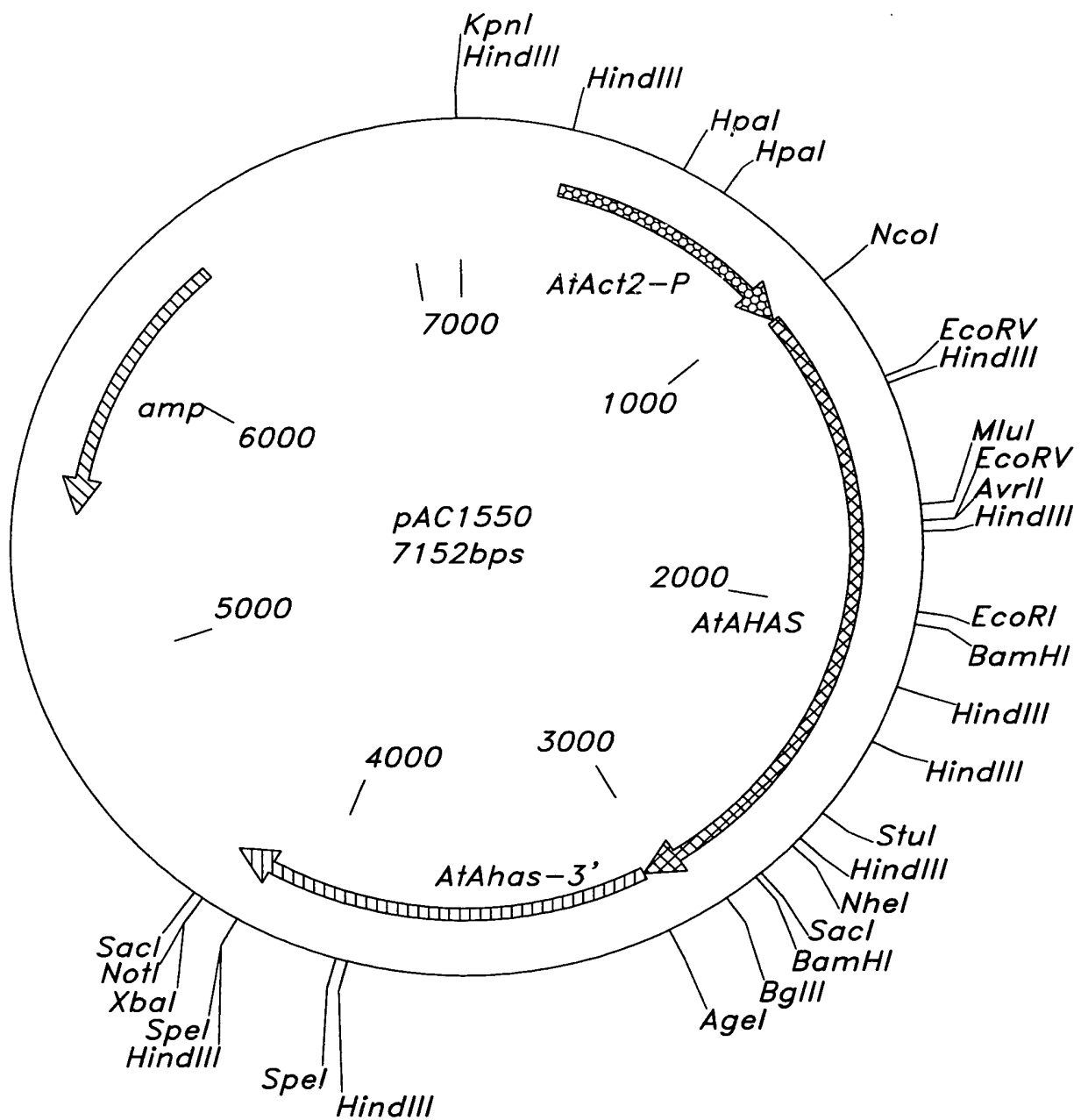


FIG 2

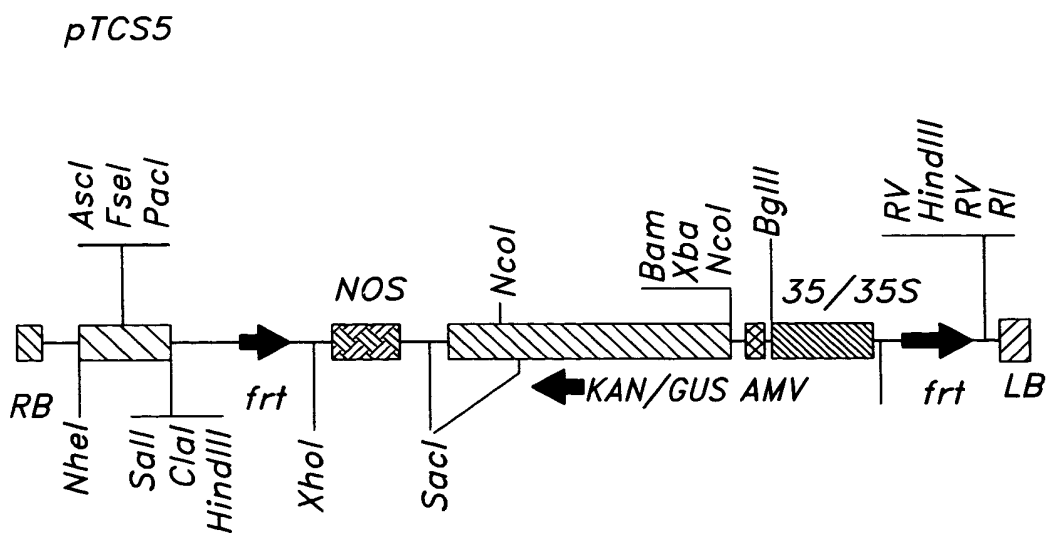
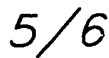
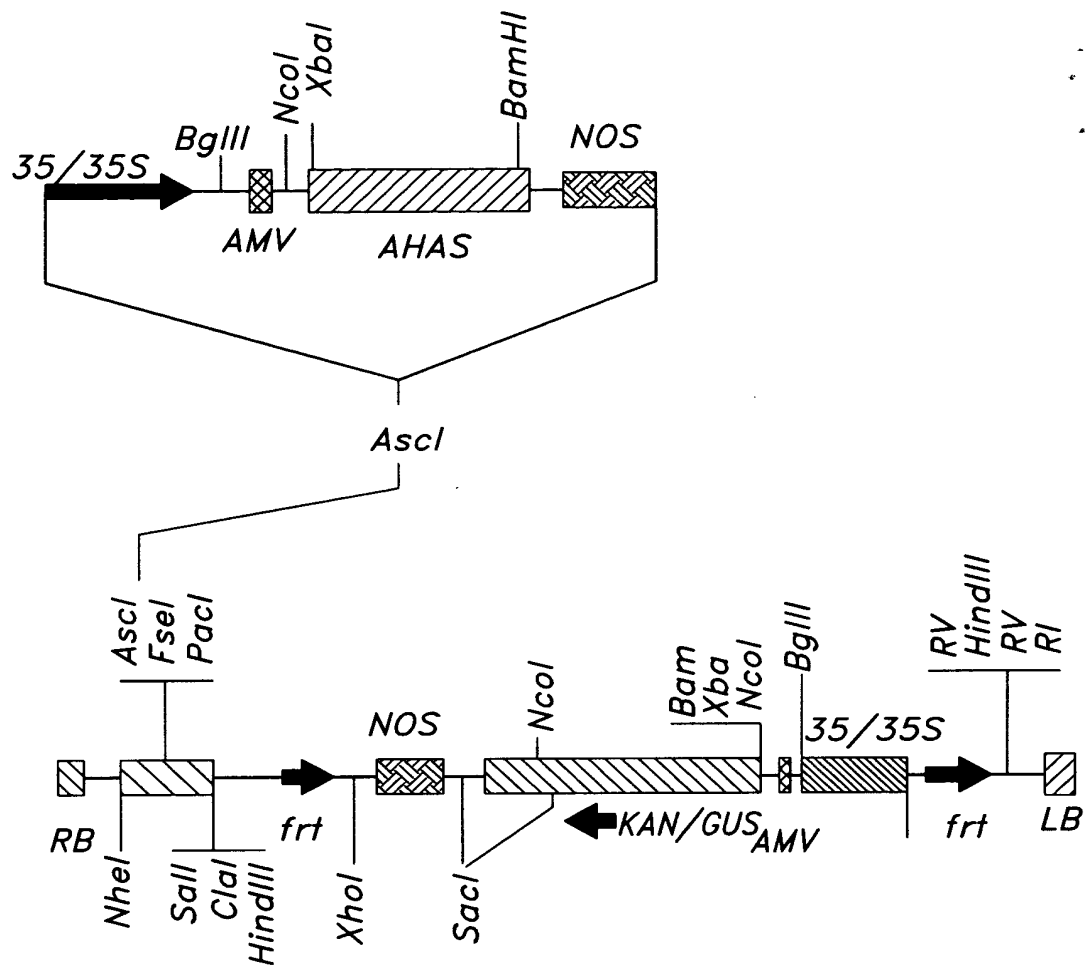


FIG 3B

**FIG 3C**